

PAULOV, S.

The appearance of new proteins in the serum of irradiated rabbits.
Folia biol. 8 no.3:186-188 '62.

1. Department of Zoology, Faculty of Science, Comenius University,
Bratislava.

(RADIATION EFFECTS experimental)
(BLOOD PROTEINS radiation effects)

PAULOV, S.

Effect of a low temperature on the development of radiation injury
in eggs of the silkworm *Bombyx mori* L. Folia biol. 7 no.4:281-284
'61.

1. Department of Zoology, Faculty of Sciences, Comenius University,
Bratislava.

(COLD) (OVUM radiation eff.) (RADIATION INJURY exper.)

PAULOV, S.

SCIENCE

Periodicals: BIOLOGIA Vol. 10, no. 6, 1955

PAULOV, S. Sensitiveness to light of different wave lengths (colors)
in the cockroach Blatta orientalis L. p. 773

Monthly List of East European Accessions (EEAI) LC, Vol. 2, No. 5,
May 1959, Unclass.

PANLOV, S.

Paulov, S. Suppression and relaxation of curved negative phototaxis of *Diatraea* of training and adaptation in *Diatraea orientalis* L. p.147.

Vol. 10, no. 2, 1955 BIOLOGIA Bratislava, Czechoslovakia

SO: Monthly List of East European Accessions, (EAL), 10, 11, 12, no. 2
February, 1956

A contribution to the knowledge of the mobility of serum proteins during paper electrophoresis. Biologia 15 no.12:916-918 '60.
(EEAI 10:8)

1. Katedra zoologie Prirodovedeckej fakulty University Komenskeho,
Bratislava.
(PROTEIN) (ELECTROPHORESIS)

PAULOV, Stefan

Notes on the weight changes in irradiated rabbits. Biologia 15 no.8:
616-618 '60. (EEAI 10:4)

1. Katedra zoologie Prirodovedeckej fakulty Univerzity Komenskeho,
Bratislava.

(RADIATION)
(BODY WEIGHT)
(COBALT)
(RADIOISOTOPES)

PAULOV, V. A.

8
1-452c

ELC
11/5

X-Ray Investigation of the Deformation and Residual Stresses in the
Grain Structure of an Alloy of the Al-Mg System
Yunikov (Fizika Metallov i Metallovedeniye, 1966, 3, 1), 351-360).
(in Russian). A letter. Experiments on the deformation in
liq. N of pure Al and its alloys contg. up to 10% Mg give the
following conclusions: The Debye characteristic temp. and the
size of the regions of coherent X-ray scattering do not depend on
compo. The lattice distortions and the residual internal stresses
produced by a given deformation increase with increasing Mg
content.—A. P. B.

for
Rel. acc.
KAL

PAULOV, V. I.

Pavlov, V. I.: Mekhanika, Molekulyarnaya fizika
(Mechanics-Molecular Physics). 2nd ed. Moscow: Gos-
darst. Izdatel. Tekh.-Teoret. Lit. 1955. 350 pp. r. S. k.
10.

ENTOMOLOGY

CZECHOSLOVAKIA

PAULOVA, Jana; Department of Ecological Physiology of Insects at the Institute of Landscape Biology, Slovak Academy of Sciences (Oddelenie Ekologickej Fyziolgie Hmyzu Ustavu Biologie Krajiny Slovenskej Akademie Vied), Bratislava.

"The Duration of Blood Sucking and the Increase of Body Weight of Females of *Culex Pipiens* *Molestus* Forsk Under Laboratory Conditions."

Bratislava, Biologia, Vol 21, No 4, 1966, pp 311 - 314

Abstract: The experiments were conducted on a human arm and on guinea pigs under narcosis. The sucking was continued ad libitum; the average duration was 4.7 minutes on a human arm and 2.6 minutes on guinea pigs under narcosis. The weight increase amounted to 144.2% on average. 3 Figures, 2 Tables, 4 Western, 1 Russian reference. (Manuscript received 7 Dec 65).

1/1

CZECHOSLOVAKIA

PAULOVÁ, Jana; PAULOV, Stefan; Department of Ecological Physiology, Institute of Rural Biology, Slovak Academy of Sciences (Oddelenie Ekologickej Fyziologie Hmyzu Ustavu Biologie Krajiny Slovenskej Akademie Vied), Bratislava; Department of Animal Physiology, Chair of General Zoology and Animal Physiology, Faculty of Natural Sciences, Comenius University (Oddelenie Zivocisnej Fyziologie Katedry Vseobecnej Zoologie a Zivocisnej Fyziologie Prirodovedeckej Fakulty Univerzity Komenskeho), Bratislava.

"Heat Denaturizing Test of Albumin Extract of Culex Pipiens Molestus Forsk."

Bratislava, Biologia, Vol 21, No 5, 1966, pp 381 - 386

Abstract: Albumen extract of Culex pipiens molestus Forsk., was heated to 35.0 to 55.0°C for 30 minutes. The decrease in the number of free macromolecules is a linear function of increasing temperature; at 50°C 50% of the albumen is precipitated. 3 Figures, 1 Czech reference.

1/1

Entomology

CZECHOSLOVAKIA

PASLICOVA, Jana; Department of Ecological Physiology of Insects, Institute of Countryside Biology, Slovak Academy of Sciences (Oddelenie ekologickej fyziologie hmyzu Slovenskej akadémie vied), Bratislava.

"Biometrics of the Imagoes of *Culex pipiens* Meigen as Males in Laboratory Breeding."

Bratislava, Biológia, Vol. 11, No. 2, 1966, pp. 20 - 21.

Abstract: The insects are bred for use in biological model experiments. The technique of breeding is described. The females are 1 1/2 times heavier than the males; the number of males exceeds slightly that of females. Biometry characteristics needed in biological models are discussed. 3 Figures, 2 Tables, 1 Czech, 1 Russian reference. (Manuscript received 6 Jan 66).

1/1

Railroads and packing. p.2.

UJITOK LAPJA (Országos Találmanyi Hivatal) Budapest. Vol 7, no. 16, Aug 1955.

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239510011-8"

SOURCE: EEAL, Vol 5, no. 7, July 19 6.

PAULINE, ...

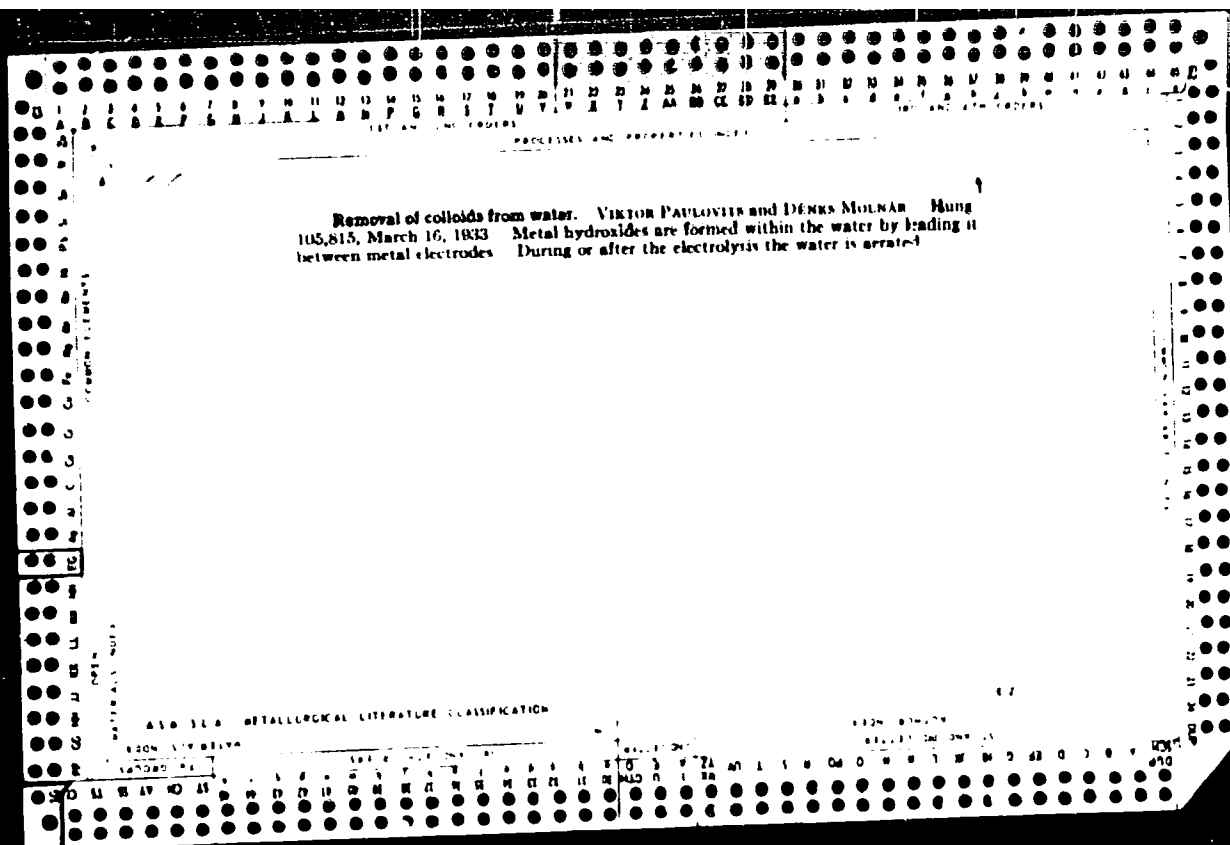
"... ..",

... ..,

CA

9 Prevention of the growth of fungi and molds on wine barrels. Pál Marosi and István Paulovits. Hung 124,008, July 1, 1940. The barrels are coated with a soln. of 0.012 kg. shalinc in 1 l. denaturated alc.

AD-56A METALLURGICAL LITERATURE CLASSIFICATION
EXPOSURE HISTORY UNIT
BELLSTONE
ALLOY
STAINLESS STEEL
QUARTZ CRYSTAL UNIT



PART FOUR, Ve.

Windbreaks, shelterbelts, etc. - 2000

"horror" method of growing. (See "horror" method of growing, page 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914,

9. Monthly List of Russian Accessions. Library of Congress, 1958. Incl.

1917-18, N.

JOHN WATSON, JR. 1917-1918, 1919-1920, 1921-1922, 1923-1924, 1925-1926, 1927-1928, 1929-1930, 1931-1932, 1933-1934, 1935-1936, 1937-1938, 1939-1940, 1941-1942, 1943-1944, 1945-1946, 1947-1948, 1949-1950, 1951-1952, 1953-1954, 1955-1956, 1957-1958, 1959-1960, 1961-1962, 1963-1964, 1965-1966, 1967-1968, 1969-1970, 1971-1972, 1973-1974, 1975-1976, 1977-1978, 1979-1980, 1981-1982, 1983-1984, 1985-1986, 1987-1988, 1989-1990, 1991-1992, 1993-1994, 1995-1996, 1997-1998, 1999-2000, 2001-2002, 2003-2004, 2005-2006, 2007-2008, 2009-2010, 2011-2012, 2013-2014, 2015-2016, 2017-2018, 2019-2020, 2021-2022, 2023-2024, 2025-2026, 2027-2028, 2029-2030, 2031-2032, 2033-2034, 2035-2036, 2037-2038, 2039-2040, 2041-2042, 2043-2044, 2045-2046, 2047-2048, 2049-2050, 2051-2052, 2053-2054, 2055-2056, 2057-2058, 2059-2060, 2061-2062, 2063-2064, 2065-2066, 2067-2068, 2069-2070, 2071-2072, 2073-2074, 2075-2076, 2077-2078, 2079-2080, 2081-2082, 2083-2084, 2085-2086, 2087-2088, 2089-2090, 2091-2092, 2093-2094, 2095-2096, 2097-2098, 2099-2100, 2101-2102, 2103-2104, 2105-2106, 2107-2108, 2109-2110, 2111-2112, 2113-2114, 2115-2116, 2117-2118, 2119-2120, 2121-2122, 2123-2124, 2125-2126, 2127-2128, 2129-2130, 2131-2132, 2133-2134, 2135-2136, 2137-2138, 2139-2140, 2141-2142, 2143-2144, 2145-2146, 2147-2148, 2149-2150, 2151-2152, 2153-2154, 2155-2156, 2157-2158, 2159-2160, 2161-2162, 2163-2164, 2165-2166, 2167-2168, 2169-2170, 2171-2172, 2173-2174, 2175-2176, 2177-2178, 2179-2180, 2181-2182, 2183-2184, 2185-2186, 2187-2188, 2189-2190, 2191-2192, 2193-2194, 2195-2196, 2197-2198, 2199-2200, 2201-2202, 2203-2204, 2205-2206, 2207-2208, 2209-2210, 2211-2212, 2213-2214, 2215-2216, 2217-2218, 2219-2220, 2221-2222, 2223-2224, 2225-2226, 2227-2228, 2229-2230, 2231-2232, 2233-2234, 2235-2236, 2237-2238, 2239-2240, 2241-2242, 2243-2244, 2245-2246, 2247-2248, 2249-2250, 2251-2252, 2253-2254, 2255-2256, 2257-2258, 2259-2260, 2261-2262, 2263-2264, 2265-2266, 2267-2268, 2269-2270, 2271-2272, 2273-2274, 2275-2276, 2277-2278, 2279-2280, 2281-2282, 2283-2284, 2285-2286, 2287-2288, 2289-2290, 2291-2292, 2293-2294, 2295-2296, 2297-2298, 2299-2300, 2301-2302, 2303-2304, 2305-2306, 2307-2308, 2309-2310, 2311-2312, 2313-2314, 2315-2316, 2317-2318, 2319-2320, 2321-2322, 2323-2324, 2325-2326, 2327-2328, 2329-2330, 2331-2332, 2333-2334, 2335-2336, 2337-2338, 2339-2340, 2341-2342, 2343-2344, 2345-2346, 2347-2348, 2349-2350, 2351-2352, 2353-2354, 2355-2356, 2357-2358, 2359-2360, 2361-2362, 2363-2364, 2365-2366, 2367-2368, 2369-2370, 2371-2372, 2373-2374, 2375-2376, 2377-2378, 2379-2380, 2381-2382, 2383-2384, 2385-2386, 2387-2388, 2389-2390, 2391-2392, 2393-2394, 2395-2396, 2397-2398, 2399-2400, 2401-2402, 2403-2404, 2405-2406, 2407-2408, 2409-2410, 2411-2412, 2413-2414, 2415-2416, 2417-2418, 2419-2420, 2421-2422, 2423-2424, 2425-2426, 2427-2428, 2429-2430, 2431-2432, 2433-2434, 2435-2436, 2437-2438, 2439-2440, 2441-2442, 2443-2444, 2445-2446, 2447-2448, 2449-2450, 2451-2452, 2453-2454, 2455-2456, 2457-2458, 2459-2460, 2461-2462, 2463-2464, 2465-2466, 2467-2468, 2469-2470, 2471-2472, 2473-2474, 2475-2476, 2477-2478, 2479-2480, 2481-2482, 2483-2484, 2485-2486, 2487-2488, 2489-2490, 2491-2492, 2493-2494, 2495-2496, 2497-2498, 2499-2500, 2501-2502, 2503-2504, 2505-2506, 2507-2508, 2509-2510, 2511-2512, 2513-2514, 2515-2516, 2517-2518, 2519-2520, 2521-2522, 2523-2524, 2525-2526, 2527-2528, 2529-2530, 2531-2532, 2533-2534, 2535-2536, 2537-2538, 2539-2540, 2541-2542, 2543-2544, 2545-2546, 2547-2548, 2549-2550, 2551-2552, 2553-2554, 2555-2556, 2557-2558, 2559-2560, 2561-2562, 2563-2564, 2565-2566, 2567-2568, 2569-2570, 2571-2572, 2573-2574, 2575-2576, 2577-2578, 2579-2580, 2581-2582, 2583-2584, 2585-2586, 2587-2588, 2589-2590, 2591-2592, 2593-2594, 2595-2596, 2597-2598, 2599-2600, 2601-2602, 2603-2604, 2605-2606, 2607-2608, 2609-2610, 2611-2612, 2613-2614, 2615-2616, 2617-2618, 2619-2620, 2621-2622, 2623-2624, 2625-2626, 2627-2628, 2629-2630, 2631-2632, 2633-2634, 2635-2636, 2637-2638, 2639-2640, 2641-2642, 2643-2644, 2645-2646, 2647-2648, 2649-2650, 2651-2652, 2653-2654, 2655-2656, 2657-2658, 265

So: Reizhner Letor's (p. 100) 7, 1955

PAULS, LEJINS.

GENERAL

PERIODICALS: VESTIS No. 3, 1958

PAULS, LEJINS. Outstanding Latvian worker in agriculture. Professor, and Doctor.
p. 7.

Monthly list of East European Accessions (KEAI) LC, Vol. 8, No. 2.
February, 1959, Unclase.

1ST AND 2ND COPIES

PROCESSES AND PROPERTIES INDEX

BC

H I

Reaction of solutions of gold salts with natural sulphides. O. R. Branner and A. Pavani. (Ann. Rept. Platin., 1959, No. 26, 100-127). The following reactions are shown to take place between aq. AuCl_3 or NaAuO_2 and certain natural sulphides:

$$3\text{PbS} + 2\text{AuCl}_3 \rightarrow 3\text{PbCl}_2 + 2\text{Au} + 3\text{S}$$

$$3\text{PbS} + 8\text{NaAuO}_2 + 4\text{NaOH} \rightarrow 3\text{PbO} + 2\text{Na}_2\text{SO}_4 + 3\text{Na}_2\text{FeO}_4 + 2\text{H}_2\text{O}$$

$$3\text{PbS} + 40\text{AuCl}_3 + 6\text{FeCl}_3 + 7\text{H}_2\text{O} \rightarrow 3\text{PbSO}_4 + 7\text{FeO}_3 + 10\text{H}_2\text{SO}_4 + 40\text{Au} + 12\text{HCl}$$

$$3\text{PbS} + 10\text{NaAuO}_2 + 4\text{H}_2\text{O} \rightarrow 3\text{Pb(OH)}_2 + 4\text{Na}_2\text{SO}_4 + 2\text{Au} + 2\text{NaOH}$$

$$3\text{PbS} + 6\text{FeCl}_3 + 3\text{H}_2\text{O} \rightarrow 3\text{PbO} + 6\text{FeO}_3 + 3\text{H}_2\text{SO}_4 + 3\text{S} + 18\text{HCl}$$

$$14\text{FeS}_2 + 14\text{AuCl}_3 + 40\text{AuCl}_3 + 20\text{HCl} + 6\text{H}_2\text{O} \rightarrow 14\text{FeS} + 20\text{Au} + 6\text{S} + 56\text{ZnCl}_2 + 14\text{FeCl}_3 + 18\text{H}_2\text{SO}_4 + 10\text{FeAsS} + 40\text{AuCl}_3 + 6\text{Fe}_2\text{O}_3 + 6\text{H}_2\text{O} \rightarrow 3\text{PbSO}_4 + 12\text{FeCl}_3 + 40\text{Au} + 10\text{H}_2\text{AsO}_4 + 2\text{H}_2\text{SO}_4 + 6\text{FeCl}_3 + 2\text{FeS}_2 + \text{FeS} + 34\text{NaAuO}_2 + 10\text{H}_2\text{O} \rightarrow 34\text{Au} + 12\text{Zn(OH)}_2 + 2\text{Fe(OH)}_2 + 12\text{Na}_2\text{SO}_4 + 3\text{S} + 10\text{NaOH}$$

NaAuO_2 is very unstable in aq. alkaline solution, and probably could not exist under natural conditions. Deposition of Au in the cementation zone of natural sulphide deposits from AuCl_3 formed in the oxidation zone is quite possible.

R. T.

ASB S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

SECTION ONE

SECTION TWO

SECTION THREE

SECTION FOUR

SECTION FIVE

SECTION SIX

SECTION SEVEN

SECTION EIGHT

SECTION NINE

SECTION TEN

SECTION ELEVEN

SECTION TWELVE

SECTION THIRTEEN

SECTION FOURTEEN

SECTION FIFTEEN

SECTION SIXTEEN

SECTION SEVENTEEN

SECTION EIGHTEEN

SECTION NINETEEN

SECTION TWENTY

SECTION TWENTY ONE

SECTION TWENTY TWO

SECTION TWENTY THREE

SECTION TWENTY FOUR

SECTION TWENTY FIVE

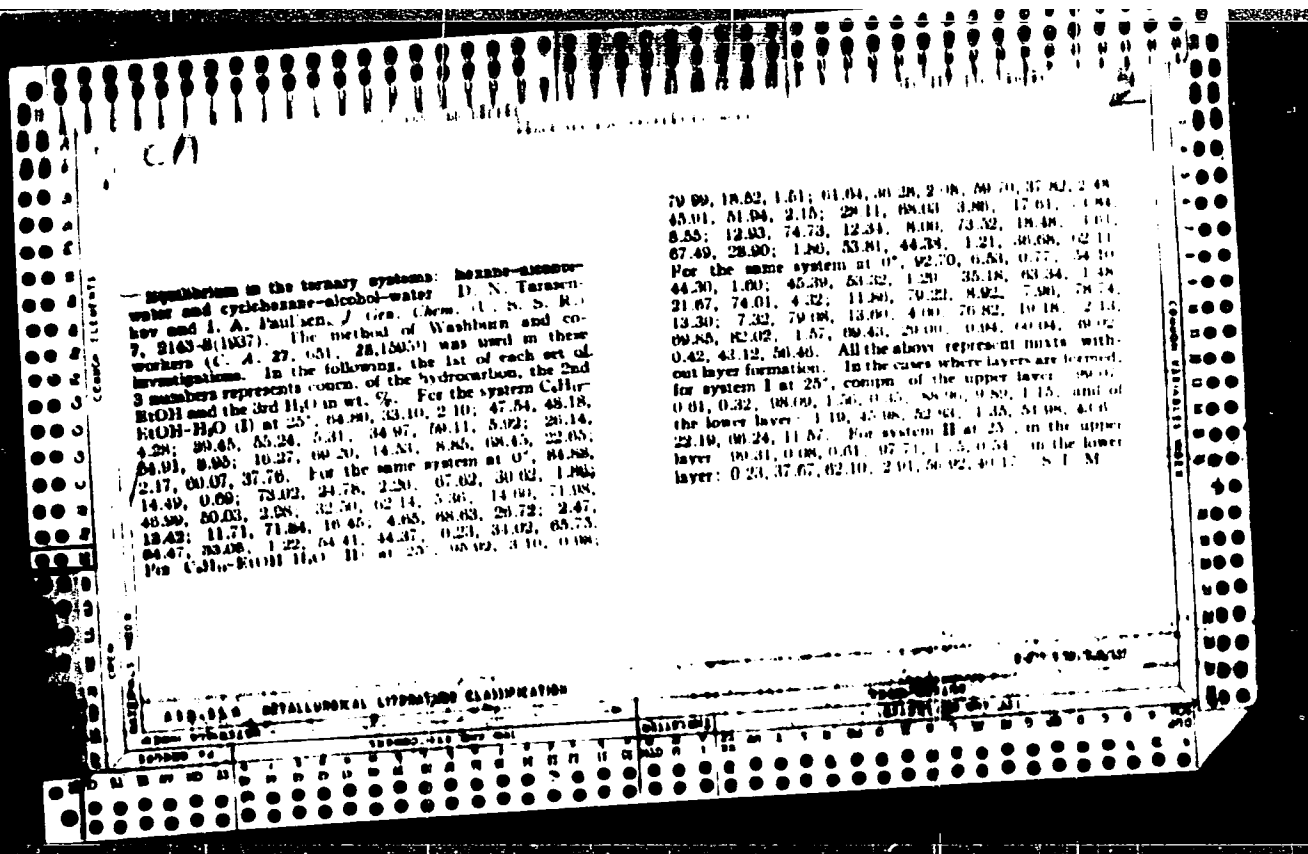
SECTION TWENTY SIX

SECTION TWENTY SEVEN

SECTION TWENTY EIGHT

SECTION TWENTY NINE

SECTION THIRTY



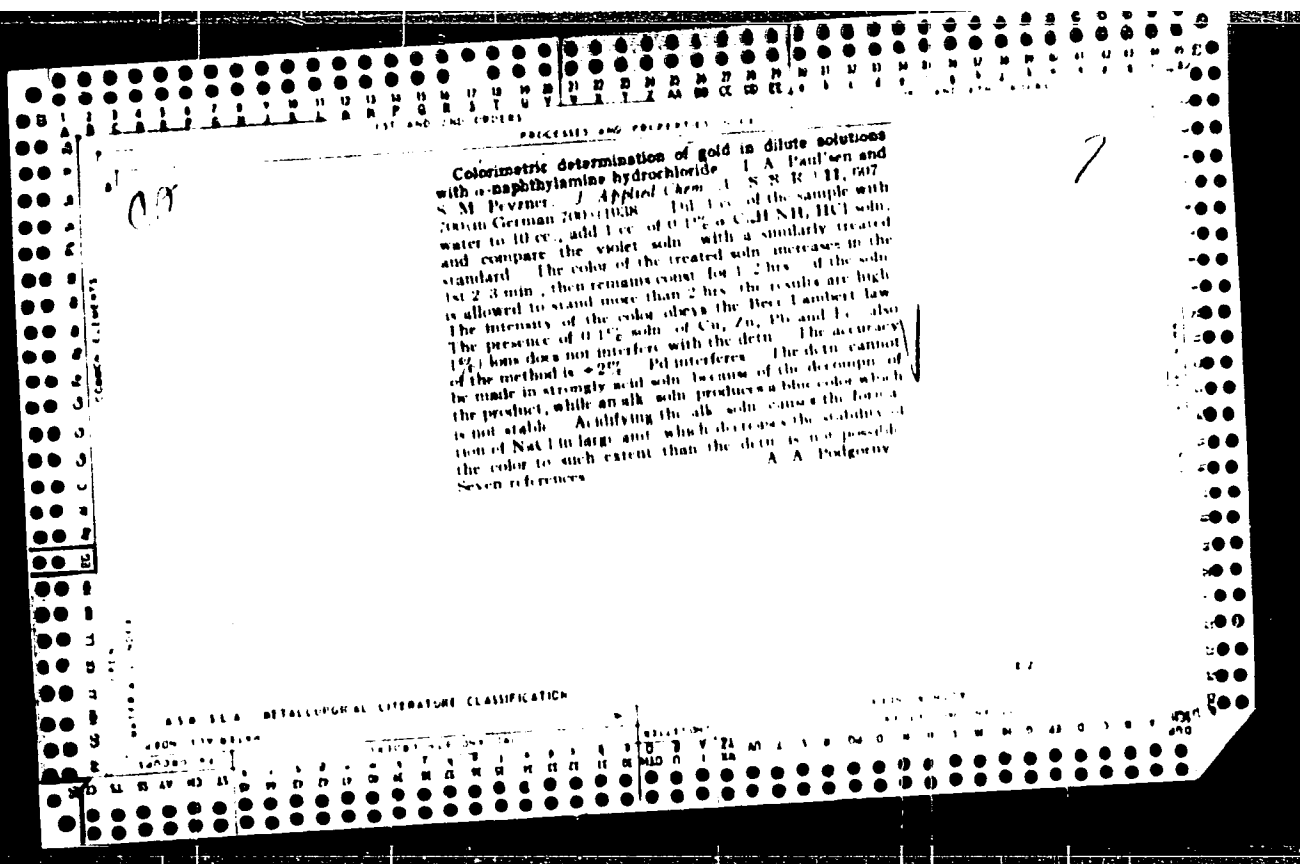
AC

71

Interaction of nodes in diagrams of ternary systems. D. N. TARASHENKOV and I. A. PAULSEN (J. Gen. Chem. Russ., 1938, 8, 76-82).—The nodes of the ternary liquid systems $\text{EtOH}-\text{H}_2\text{O}-\text{C}_6\text{H}_6$, $-\text{PhMe}$, or $-\text{cyclohexane}$, $\text{AcOH}-\text{H}_2\text{O}-\text{C}_6\text{H}_6$, or $-\text{CHCl}_3$, and $\text{COMe}_2-\text{H}_2\text{O}-\text{CHCl}_3$ are shown, when produced, to intersect in a single point. R. T.

ASD-5L4 DETALLURGICAL LITERATURE CLASSIFICATION

SECTION	SERIAL	DATE	AUTHOR	TITLE	ABSTRACT	NOTES
1	1	1	1	1	1	1
2	2	2	2	2	2	2
3	3	3	3	3	3	3
4	4	4	4	4	4	4
5	5	5	5	5	5	5
6	6	6	6	6	6	6
7	7	7	7	7	7	7
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
21	21	21	21	21	21	21
22	22	22	22	22	22	22
23	23	23	23	23	23	23
24	24	24	24	24	24	24
25	25	25	25	25	25	25
26	26	26	26	26	26	26
27	27	27	27	27	27	27
28	28	28	28	28	28	28
29	29	29	29	29	29	29
30	30	30	30	30	30	30
31	31	31	31	31	31	31
32	32	32	32	32	32	32
33	33	33	33	33	33	33
34	34	34	34	34	34	34
35	35	35	35	35	35	35
36	36	36	36	36	36	36
37	37	37	37	37	37	37
38	38	38	38	38	38	38
39	39	39	39	39	39	39
40	40	40	40	40	40	40
41	41	41	41	41	41	41
42	42	42	42	42	42	42
43	43	43	43	43	43	43
44	44	44	44	44	44	44
45	45	45	45	45	45	45
46	46	46	46	46	46	46
47	47	47	47	47	47	47
48	48	48	48	48	48	48
49	49	49	49	49	49	49
50	50	50	50	50	50	50
51	51	51	51	51	51	51
52	52	52	52	52	52	52
53	53	53	53	53	53	53
54	54	54	54	54	54	54
55	55	55	55	55	55	55
56	56	56	56	56	56	56
57	57	57	57	57	57	57
58	58	58	58	58	58	58
59	59	59	59	59	59	59
60	60	60	60	60	60	60
61	61	61	61	61	61	61
62	62	62	62	62	62	62
63	63	63	63	63	63	63
64	64	64	64	64	64	64
65	65	65	65	65	65	65
66	66	66	66	66	66	66
67	67	67	67	67	67	67
68	68	68	68	68	68	68
69	69	69	69	69	69	69
70	70	70	70	70	70	70
71	71	71	71	71	71	71
72	72	72	72	72	72	72
73	73	73	73	73	73	73
74	74	74	74	74	74	74
75	75	75	75	75	75	75
76	76	76	76	76	76	76
77	77	77	77	77	77	77
78	78	78	78	78	78	78
79	79	79	79	79	79	79
80	80	80	80	80	80	80
81	81	81	81	81	81	81
82	82	82	82	82	82	82
83	83	83	83	83	83	83
84	84	84	84	84	84	84
85	85	85	85	85	85	85
86	86	86	86	86	86	86
87	87	87	87	87	87	87
88	88	88	88	88	88	88
89	89	89	89	89	89	89
90	90	90	90	90	90	90
91	91	91	91	91	91	91
92	92	92	92	92	92	92
93	93	93	93	93	93	93
94	94	94	94	94	94	94
95	95	95	95	95	95	95
96	96	96	96	96	96	96
97	97	97	97	97	97	97
98	98	98	98	98	98	98
99	99	99	99	99	99	99
100	100	100	100	100	100	100

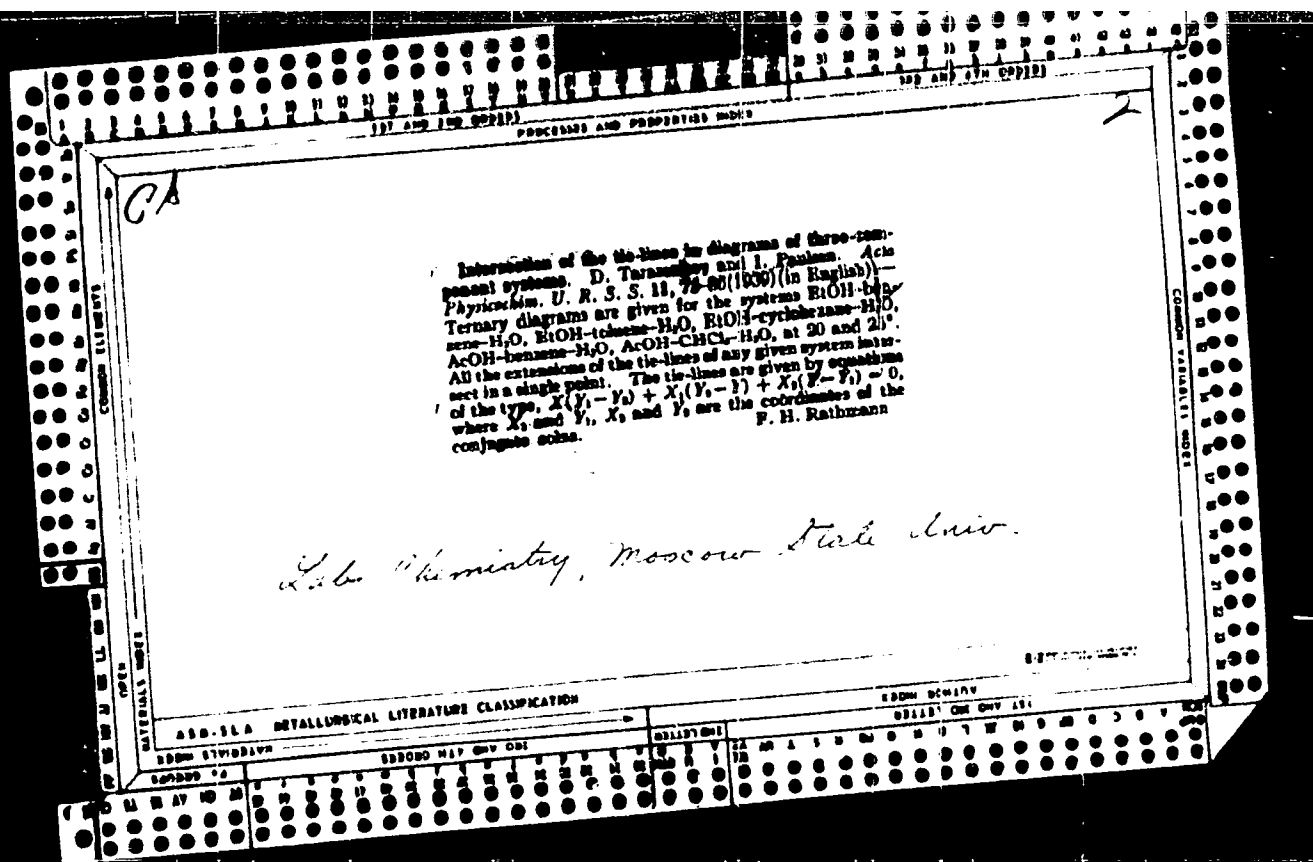


Action of minerals on gold solutions (U. E. Dyvignov and I. A. Paulsen, *Concepts and methods*, S. S. S. 21, 1, 6-8, 1968, in English). An investigation of the reactions between sulfide minerals (galena, sphalerite, chalcocite, pyrite and arsenopyrite) and AuCl_3 or NaAuCl_4 led to the following equations: (a) $3 \text{PbS} + 2 \text{AuCl}_3 + 4 \text{HCl} + 2 \text{Au} + 3 \text{S}_2 \rightarrow 9 \text{FeS} + 10 \text{AuCl}_3 + 6 \text{FeCl}_2 + 2 \text{H}_2\text{O} + 8 \text{FeSO}_4 + 1 \text{FeCl}_3 + 10 \text{H}_2\text{SO}_4 + 4 \text{Au} + 1 \text{HCl} + 1 \text{FeCuS}_2 + 7 \text{AuCl}_3 + 6 \text{H}_2\text{O} + 7 \text{Au} + 1 \text{FeCl}_3 + 3 \text{CuCl}_2 + 1.5 \text{H}_2\text{SO}_4 + 4.5 \text{S} + 9 \text{HCl} + 4 \text{ZnS} + 2 \text{FeS} + 20 \text{AuCl}_3 + 10 \text{HCl} + 26 \text{H}_2\text{O} = 24.5 \text{H}_2\text{S} + 1 \text{H}_2\text{SO}_4 + 20 \text{Au} + 28 \text{ZnCl}_2 + 7 \text{FeCl}_2 + 4 \text{S}_2 + 5 \text{FeAsS} + 2.5 \text{Fe}_2\text{O}_3 + 20 \text{AuCl}_3 + 32.5 \text{H}_2\text{O} = 4 \text{FeSO}_4 + 6 \text{FeCl}_2 + 20 \text{Au} + 5 \text{H}_2\text{AsO}_4 + \text{H}_2\text{SO}_4 + 48 \text{HCl} + 4 \text{PbS} + 5 \text{NaAuCl}_4 + 4 \text{NaOH} + 8 \text{Au} + 3 \text{PbNaO}_2 + 6 \text{Na}_2\text{SO}_4 + 2 \text{H}_2\text{O} + 2 \text{Fe} + 4 \text{ZnS} + \text{FeS} + 1 \text{NaAuCl}_4 + 1 \text{H}_2\text{O} + \text{Au} + 6 \text{Zn(OH)}_2 + 1.5 \text{Fe(OH)}_3 + \text{Na}_2\text{SO}_4 + 1.5 \text{S} + \text{NaOH} + 2 \text{FeS}_2 + 10 \text{NaAuCl}_4 + 1 \text{H}_2\text{O} + 2 \text{Fe(OH)}_3 + 4 \text{Na}_2\text{SO}_4 + 10 \text{Au} + 2 \text{NaOH} + 1 \text{S} is unlikely that reactions (c) and (d) occur in nature. The other equations probably represent the processes of deposition of Au in the concentration zone.$

CA

Action of minerals on gold solutions
and L. A. Paulsen. *Ann. geol. polone.* Inst. chem. geol.
U.S.S.R. No. 10, 1963, 699. No. 11, 1964, 711.
6580

AS 53.4 METALLURGICAL LITERATURE CLASSIFICATION



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

BC

6-2

Theory of formation of vein gold deposits.
 O. E. ZYAKOVSKIY and I. A. PAVLOV (Comm. read.
 Acad. Sci. U.R.S.S. 1955, 22, 617-621).—The
 velocity of dissolution of Au in solutions of Na₂S
 saturated with H₂S increases to a max. with increasing
 concn. and then decreases to a very low val. at high
 concn., in accordance with the view that the effective
 agent is NaHS; whereas the very concn. solutions con-
 tain mainly Na₂S. The dissolution is facilitated by
 the presence of finely ground quartz or pyrite but is
 hindered by carbonates. The solubility increases
 markedly with rising temp. over the range 70–300°.
 so that the pptn. of Au does not require the presence
 of any particular mineral but is simply the result of
 cooling.

F. J. G.

ADD-11A METALLURGICAL LITERATURE CLASSIFICATION

FROM DONORS
 LIBRARY ON MAY 11

FROM STUDENTS
 LIBRARY ON MAY 11

LIBRARY ON MAY 11

LIBRARY ON MAY 11

LIBRARY ON MAY 11

CA

Activation energy of the hydration of metaphosphoric
acids in alkaline solution. I. A. Pavlov (Sergo Ordzhonik-
idze Aviation Inst. Moscow) *Doklady Akad. Nauk
S.S.S.R.* 76, 221-2 (1951).—Rates of hydration were meas-
ured in 0.1 N solns of Na trimetaphosphate (I) prepd. by
heating $\text{NaH}_2\text{P}_2\text{O}_7$, and of Na tetrametaphosphate (II)
prepd. by neutralization of a freshly made soln. of tetra-
metaphosphoric acid, obtained by soln. in H_2O of the volatile
metaphosphoric acid. In 0.1 N alkali soln., the rate constants
of hydration of P_2O_5 at 65, 75, 85, 90°, $10^3 k$ (min.⁻¹) were, for I at 65, 75, 85, 90°, $10^3 k$ = 10, 27, 42,
77; for II at 75, 85, 90, 95, 100°, $10^3 k$ = 1.2, 2.9, 4.8, 10.2,
16.0. Consequently, the hydration of II is about 1/10th as
fast as that of I. The activation energies are, for I, E_a =
20.0, for II, 30.8 kcal/mole. This establishes the different
nature of I and II in agreement with Khmel'nyy (C.A. 38
6221; 30, 1815).

1951

PAUL, I. I.

(5)
 ✓ Determination of lithium in air. I. I. Paul and A. P. Vajnshteyn (Sci. Research Summ. Inst., Novosibirsk). *Gigiena i Sanit.* 1953, No. 9, 49-50. — Li in the air can be detd. colorimetrically according to Nazarenko and Filatova (C.A. 44, 9891g), in which the air is treated to give LiKFeO_4 insol. in H_2O , from which the Fe can be detd. colorimetrically by the $\text{Fe}(\text{CNS})$ method. The reaction is sensitive to 0.002 mg. Fe, or 0.000245 mg. Li per 3 ml. At the level of 0.0004-0.0008 mg./l. in the air, the reproducibility of standard samples is within 6-10% relative.

G. M. Kosolapoff

PAUD, 1 5

27

3

4:41

7

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

338

339

340

341

342

343

344

345

346

347

348

349

350

351

352

353

354

355

356

357

358

359

360

361

362

363

364

365

366

367

368

369

370

371

372

373

374

375

376

377

378

379

380

381

382

383

384

385

386

387

388

389

390

391

392

393

394

395

396

397

398

399

400

401

402

403

404

405

406

407

408

409

410

411

412

413

414

415

416

417

418

419

420

421

422

423

424

425

426

427

428

429

430

431

432

433

434

435

436

437

438

439

440

441

442

443

444

445

446

447

448

449

450

451

452

453

454

455

456

457

458

459

460

461

462

463

464

465

466

467

468

469

470

471

472

473

474

475

476

477

478

479

480

481

482

483

484

485

486

487

488

489

490

491

492

493

494

495

496

497

498

499

500

501

502

503

504

505

506

507

508

509

510

511

512

513

514

515

516

517

518

519

520

521

522

523

524

525

526

527

528

529

530

531

532

533

534

535

536

537

538

539

540

541

542

543

544

545

546

547

548

549

550

551

552

553

554

555

556

557

558

559

560

561

562

563

564

565

566

567

568

569

570

571

572

573

574

575

576

577

578

579

580

581

582

583

584

585

586

587

588

589

590

591

592

593

594

595

596

597

598

599

600

601

602

603

604

605

606

607

608

609

610

611

612

613

614

615

616

617

618

619

620

621

622

623

624

625

626

627

628

629

630

631

632

633

634

635

636

637

638

639

640

641

642

643

644

645

646

647

648

649

650

651

652

653

654

655

656

657

658

659

660

661

662

663

664

665

666

667

668

669

670

671

672

673

674

675

676

677

678

679

680

681

682

683

684

685

686

687

688

689

690

691

692

693

694

695

696

697

698

699

700

701

702

703

704

705

706

707

708

709

710

711

712

713

714

715

716

717

718

719

720

721

722

723

724

725

726

727

728

729

730

731

732

733

734

735

736

737

738

739

740

741

742

743

744

745

746

747

748

749

750

751

752

753

754

755

756

757

758

759

760

761

762

763

764

765

766

767

768

769

770

771

772

773

774

775

776

777

778

779

780

781

782

783

784

785

786

787

788

789

790

791

792

793

794

795

796

797

798

799

800

801

802

803

804

805

806

807

808

809

810

811

812

813

814

815

816

817

818

819

820

821

822

823

824

825

826

827

828

829

830

831

832

833

834

835

836

837

838

839

840

841

842

843

844

845

846

847

848

849

850

851

852

853

854

855

856

857

858

859

860

861

862

863

864

865

866

867

868

869

870

871

872

873

874

875

876

877

878

879

880

881

882

883

884

885

886

887

888

889

890

891

892

893

894

895

896

897

898

899

900

901

902

903

904

905

906

907

908

909

910

911

912

913

914

915

916

917

918

919

920

921

922

923

924

925

926

927

928

929

930

931

932

933

934

935

936

937

938

939

940

941

942

943

944

945

946

947

948

949

950

951

952

953

954

955

956

957

958

959

960

961

962

963

964

965

966

967

968

969

970

971

972

973

974

975

976

977

978

979

980

981

982

983

984

985

986

987

988

989

990

991

992

993

994

995

996

997

998

999

1000

1001

1002

1003

1004

1005

1006

1007

1008

1009

1010

1011

1012

1013

1014

1015

1016

1017

1018

1019

1020

1021

1022

RUMANIA. Human and Animal Physiology - Internal Secretion.
General Problems.

T

Abs Jour : Ref Zhur Biol., No 3, 1959, 12911

Author : Pol, E., Paul, I., Sasu, V.

Inst : -

Title : Determination of Function of Adrenals Using ACTH, Insulin, Adrenalin, and Pilocarpine (Change in Leukocyte Count and Glycemia in Sheep)

Orig Pub : Probl. zootehn. si veterin., 1957, No 12, 49-53

Abstract : In sheep the injection of ACTH, insulin, adrenaline, and pilocarpine produced a neutropenia, lymphopenia, and eosinopenia. Cortisone manifested a lower lymphopenia and eosinopenia. ACTH, cortisone, and adrenaline increased, and pilocarpine and insulin decreased, glycemia. The reduction in the number of lymphocytes and eosinophils can serve as an indicator of adrenal function.

Card 1/1

- 64 -

PAUL, J.

The Use of Concrete in Buildings in the Metallurgical Industry. J. Paul. *Hornické Listy*, 1957, 12, (1), 401-405. [In Czech]. A technical and economic assessment is made of the merits of concrete and steel structures for works in the metallurgical industry. Monolithic concrete structures are considered to be efficient and suitable; the scope of assembled structures is limited. —S. Z.

~~SECRET~~ *PAUL Jaromir*
CZECHOSLOVAKIA / Chemical Technology. Chemical H-3
Products and Their Application. Control
and Measuring Devices. Automatic Regula-
tion

Abs Jour : Ref. Zhur. - Khimiya, No 2, 1958, No 4920

Author : Knoch Jiri, Paul Jaromir

Inst : Not Given

Title : Magnetic Level Gauge

Orig Pub : Chem. prumysl, 1957, 7, No 3, 139

Abstract : The apparatus consists of a tube of non-magnetic metal, inside of which a hollow glass float, containing iron foil, is floating on the surface of the liquid. Outside the tube, suspended from a filament, is a magnet with a level index, which

Card : 1/2

PAUL, J.

The use of concrete in metallurgical constructions. p. 401. (Hutnicke listy. Vol. 12, No. 5, May 1957, Brno, Czechoslovakia)

SO: Monthly List of East European Accessions (LEAL) LC, Vol. 6, No. 8, Aug 1960. Uncd.

DAVIDSON, J.H.; THOMSON, R.Y.; PAUL, J.; SMELLIE, R.M.S.; GOUTIER, R.

Incorporation mechanisms in nucleic acid biosynthesis [in English
with summary in Russian]. *Biokhimiia* 22 no.1/2:157-161 Ja-F '57.

(MIRA 10:7)

1. Department of Biochemistry, the University of Glasgow, Scotland.
(NUCLEIC ACIDS, metabolism,
biosynthesis, incorporation mechanisms)

1ST AND 2ND CITIES		PROCESSES AND PROPERTIES INDEX		3RD AND 4TH CITIES	
2					
Frank, John, and Marie Tammery. George Sartan. 1911 25, 26-31 (1907).—In addn. to information concerning the characters listed in the title, numerous facts regarding the phys. chemist Grigore Wyruboff (Grigorii Nikolayevich Vyryubov) (1843-1913) are given. H. G. Fletcher, Jr.					
ADD. H. A. METALLURGICAL LITERATURE CLASSIFICATION					
EDITH STINEBAUGH		EDITH STINEBAUGH		EDITH STINEBAUGH	
EDITH STINEBAUGH		EDITH STINEBAUGH		EDITH STINEBAUGH	

PHASE I BOOK EXPLOITATION

SCV/5799

Unkov, Ye.P., Doctor of Technical Sciences, Professor, Ed.

Sovremennoye sostoyaniye kuznechno-shtampovogochnogo proizvodstva (Present State of the Pressworking of Metals) [Moscow] Mashgiz, 1961. 434 p. 5000 copies printed.

Ed. of Publishing House: A.I. Sirotin; Tech. Ed.: B.I. Model'; Managing Ed. for Literature on the Hot Working of Metals: S.Ya. Golovin, Engineer.

Title: Kuznechno-shtampovoye proizvodstvo v SSSR (The Pressworking of Metals in the USSR) by: A.V. Altyks, D.I. Berezukovskiy, V.F. Volkovitskiy, I.I. Girsh (deceased), L.D. Gol'man, S.P. Granovskiy, N.S. Dobrinakiy, A.I. Zimin, S. L. Zlotnikov, A.I. Kagalovskiy, P.V. Lobachev, V.N. Martynov, Ye.N. Meshin, G.A. Navrotsky, Ya.M. Okhrimenko, G.N. Rovinskiy, Ye.A. Stetska, Yu.L. Rozhdestvenskiy, N.V. Tikhomirov, Ye.P. Unkov, V.F. Shecheglov, and L.A. Shofman; Eds: Ye.P. Unkov, Doctor of Technical Sciences, Professor, and B.V. Rozonov.

Title: Kuznechno-shtampovoye proizvodstvo v ChSSR (The Pressworking of Metals in the Czechoslovak SR) by: S. Burda, F. Hradil, F. Drastiz, Z. Zlatohlavak

Card 1/8

SGI/5799

Present State of the (Cont.)

Z. Nejval, V. Krauz, F. Kupka, F. Majer, K. Marvan, J. Novak, J. Olajal,
K. Paul, B. Sanner, M. Honz, J. Chmela, V. Sindelar, and J. Solc; and:
A. Nejepsa and M. Vlk.

PURPOSE: This book is intended for engineers and scientific personnel concerned with the pressworking of metals.

COVERAGE: Published jointly by Mashiz and SNTL, the book discusses the present state of the pressworking of metals in the USSR and the Czechoslovak Socialist Republic. Chapters were written by both Soviet and Czechoslovak writers. No personalities are mentioned. There are 129 references: 98 Soviet, 16 English, 8 German, 5 Czech, and 2 French.

TABLE OF CONTENTS:

PRESSWORKING IN THE USSR

Ch. I. The Characteristics of Forging Shops in USSR Plants [A.I. Zimin and
Ye.P. Unkov] 5

Ch. II. Methods of Calculating the Pressure for Forging in the Pressworking

Card 2/8

Present State of the (Cont.)

SOV/5799

of Metals [Ye.P. Unkov]	13
Ch. III. Die Forging on Forging Presses [V.F. Volkovitskiy]	22
Ch. IV. Die Forging on Horizontal Upstrokes [I.I. Girsh, deceased]	31
Ch. V. Die Forging on Drop Hammers and [Pillar-Screw] Percussion Presses [Ya. M. Okhrimenko and V.F. Shecheglov]	41
Ch. VI. The Making of Forgings and Shaped Blanks in Forging Rolls [V.N. Martynov]	58
Ch. VII. Die-Sizing in Squeeze-Forming Presses [V.F. Volkovitskiy]	77
Ch. VIII. Rolling-Out Annular Blanks [Yu.L. Rozhdestvenskiy]	82
Ch. IX. The Manufacture of Metal Hardware on Pressworking Automatics [G.A. Navrotskiy]	93

Card 3/8

Present State of the (Cont.)	SOV/5799	
Ch. X. Bending and Straightening of Sheets, Sheets, and Tubes [Ye.M. Moshnin]		112
Ch. XI. Stamping From Sheets and Strips [S.L. Zlotnikov and G.N. Rovinskiy]		119
Ch. XII. Automatic Pressworking Lines [S.L. Zlotnikov]		146
Ch. XIII. The Equipment of Blank-Pressing Shops and Sections in Pressworking [P.V. Lobachov]		159
Ch. XIV. The Production of Blanks for [Machined] Parts by Helical Cross Rolling [S.P. Gerasimovskiy and Ye. A. Stosha]		173
Ch. XV. Metal Extrusion on Hydraulic Presses [A.I. Kagalovskiy and L.A. Shofman]		188
Ch. XVI. Parts Forging From Light-Metal Alloys on Large Hydraulic Presses [L.D. Gol'man and L.A. Shofman]		201

Card 4/8

Present State of the (Cont.)

SCV/5799

Ch. XVII. Mass Production of Parts (Solid Wheels and Tires) by Forging With Subsequent Rolling [A.V. Altykiss, and L.D. Gol'man]	205
Ch. XVIII. Forging and Bending of Plates [Ye.M. Meshain]	216
Ch. XIX. Making Large Forgings on Hydraulic Presses [N.S. Dobrinskiy, and N.V. Timofeev]	229
Ch. XX. Drop-Hammer and Crash-Press Forging [D.I. Berezhkovskiy and V.P. Shecheglov]	228
Bibliography	225

PROCESSES IN THE USSR

Ch. I. The Development of Metal Processing Processes in the Czechoslovakian Socialist Republic [T. Brantik, Railroad Engineering Institute, Prague]	261
---	-----

Card 5/8

Present State of the (Cont.)

SSI/5799

- | | | |
|----------|--|-----|
| Ch. II. | Making Large Forgings [B. Kraus, New Metallurgical Plant imeni Klement Gottwald, Kladno] | 272 |
| Ch. III. | The Forging of Rotors for Turbine Generators [J. Novák, Metallurgical Plant imeni Lenin, Písek] | 279 |
| Ch. IV. | The Forging of Large Crankshafts [S. Burda, K. Paul, and M. Hanz, Metallurgical Plant imeni Lenin, Písek] | 314 |
| Ch. V. | Techniques Used in Forging Large Rotors [T. Blatný, Vítkovice Metallurgical Plant imeni Klement Gottwald, Ostrava] | 335 |
| Ch. VI. | The Forging of Forked Pipes for Gas Pipelines [J. Čížek, Vítkovice Metallurgical Plant imeni Klement Gottwald, Ostrava] | 345 |
| Ch. VII. | The Forging of Large Strengthening Rings for the Runners of Mixed-Flow Turbines [P. Kufner, Vítkovice Metallurgical Plant imeni Klement Gottwald, Ostrava] | 348 |

Card 6/8

3

Present State of the (Cont.)

807/5799

- | | |
|---|-----|
| Ch. VIII. Scientific Research Work in the Field of Cold Impact Forging of Metals [F. Hrdáčil, Plant ineni Šmeral, Brno] | 355 |
| Ch. IX. Experience in the Cold Impact Forging of Nonferrous Metals [K. Marvan and J. Čáčekal, Plant Tesla, National Enterprise, Hloubětín, and V. Šindalák, Scientific Research Institute of Vacuum Electrical Engineering, Prague] | 381 |
| Ch. X. The Manufacturing Process and Organization in the Stamping of Bodies at the Automobile Plant "National Enterprise (AZEP) Mladá Boleslav" [Z. Kojval, AZEP, Mladá Boleslav] | 397 |
| Ch. XI. The Mechanization of Obsolete Enterprises as a Means of Increasing Labor Productivity [B. Šamr, Vítkovice Metallurgical Plant ineni Klement Gottwald, Ostrava] | 410 |
| Ch. XII. The Initial Pressworking of FeAl Alloys and Large FeCrAl Castings [P. Major and J. Šolc, Scientific Research Institute of Iron, Prague]. | |

Card 7/8

TEST AND /NO ORDER																										PROCESSES AND PROPERTIES																									
TEST AND /NO ORDER													PROCESSES AND PROPERTIES																																						
CA Molybdenum plating of metals K. A. Paul, Russ 73,756, Aug 31, 1938. Mo oxides are treated with hydro- halogen acids until a soln of d 1.2 to 1.3 is obtained. This is diluted with H₂O to 10-25 H₂O, and plating is effected at a c.d. of 75 amp/sq in. and a voltage of up to 6 v.																																																			
ASD 31.4 METALLURGICAL LITERATURE CLASSIFICATION																																																			

1ST AND 2ND CODES		PROCESSES AND PROPERTIES INDEX	
CA			
Dissociation constants and their relations to the activity in peroxidases. H. Thorell and K.-G. Paul. <i>Acta Chem. Mineral. Geol.</i> 18A, No. 12, 23 pp (1944). Spectrophotometric measurements of the light absorption of horseradish peroxidase between pH 7.5 and 3.3 reveal the presence of two hitherto unknown hlm-linked groups with pK 6.0 and 4.0. The former corresponds with $K_{a,OH}$. $\frac{[Fe(OH)]}{[FeOH]} = 10^{-6}$, calculated from the dissociation constants of the fluoride complex. This means that the OH group at the Fe atom affects light absorption to some extent. The second hlm-linked group coincides with the effect of pH on the activity in the purpuragallin test. To explain this, it is assumed that the link between Fe and the protein component is broken as a result of the combination of a proton with the Fe-binding group of the protein, pK for this reaction being 4.0. Peroxidase activity then ceases. The dissociation constant of the fluoride complex of lactoperoxidase has been measured at different pH values. The dissociation constants for OH and F are $K_{a,OH} = 10^{-6.2}$ and $K_{a,F} = 10^{-5.6}$. Lactoperoxidase has a greater affinity for OH and F than has horseradish peroxidase. OH is so bound to Fe that it can compete with F for a coordination position about Fe. The dissociation constant of methemoglobin fluoride in acid solution confirms the view that Fe in methemoglobin does not hold any OH group. The data are discussed in relation to theories of peroxidase structure. H. A.			
ASACSLA METALLURGICAL LITERATURE CLASSIFICATION			

L 40276-66 P(v)/T/P(-)/E1/E P(k)/H(h)/A/C(1) ACC NR: AP6023651 (A, N) SOURCE CODE: GE/0051/66/000/007/C407/0408

AUTHOR: Ratajczak, G. (Ribnitz-Damgarten): Paul, M. (Rostock)

ORG: none

TITLE: Propulsion mechanism for a fully automatic welding apparatus for welding in a difficult position

SOURCE: Schiffbautechnik, no. 7, 1966, 407-408

TOPIC TAGS: welding, automatic welding, seam welding, welding equipment

ABSTRACT: This Author Certificate introduces a mechanism for moving a fully automatic welder along a weld seam without using guide rails and electric power (see Fig. 1).

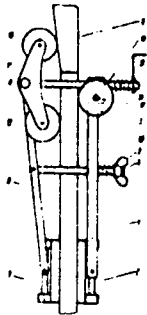


Fig. 1. Propulsion mechanism for welding apparatus (the foreplate 4 is removed)

Card 1/2

PAUL, M. (A4)

CZECHOSLOVAKIA

GROSSMANN, J., MD; Maly, V., MD; PAUL, M., MD; SMID, V., MD;
STEFANEK, J., MD.

1. Internal Medicine Ward OUNZ (Interni oddeleni OUNZ), Jihlava (for Smid); 2. Radiological Ward OUNZ (Radiologické oddeleni OUNZ), Jihlava (for Maly); 3. Okres Transfusion Station (Okresní transfúzní stanice), Jihlava (for Paul)

Prague, Praktický lékař, No 13-14, 1963, pp 529-530

"Treatment of Neurological Complications in Acute Leukemia."

(5)

PAUL, Milan

On the problem of hand sterilization in ocular operations.
Cesk. ofth. 16 no.6:383-387 S '60.

1. Oční klinika University v Brně, přednosta prof. MUDr. Jan
Vanysek.

(STERILIZATION)

(OPHTHALMOLOGY surg.)

PAUL, M. E.

S.M. RYKIN, Sibirsk. Kavkaz, 1936, n. 7-8, 20-30

PAUL, V.; CEJKA, J.

"Domestic oils for diffusion pumps." P. 485.

SLABOPROUDY OBZOR. (Ministerstvo presneho strojirenstvi, Ministerstvo spoju a Vedecka technicka spolecnost pro elektrotechniku pri CSAV). Praha, Czechoslovakia, Vol. 16, No. 9, Sept. 1956.

Monthly List of East European Accessions (EEA1), LC, Vol. 8, No. 6, August 1959.
Uncla.

Country : Rumania

B-16

Author :

4789

Editor : Hoffman, S.; Paul, V.; Jacek, B.

Title : Paper Chromatography Analysis of a Number of Dyestuff Intermediates.

Ref. : Rev. Chim., 1975, 9, 10, 11, 12-16

Abstract : By the method of paper chromatography the following separations were effected: 1) 1-naphthylamine-3,6,8-trisulfonic acid (Hoch's acid) from 1-amino-8-naphthol-3,6-disulfonic acid (H-acid), and 2) 1-naphthol-3,6,8-trisulfonic acid from chromotropic acid, with washing with a 10% solution of NaCl, and 3) of Laurent's acid from naphthionic acid, using a n-butanol-2,2,2-trifluoroethanol-water mixture (40:10:50) as solvent, and washing with 10% solution of NaCl.

M. BARKOVA

PAUL, V.

SCIENCE

Periodicals: REVISTA DE CHIMIE Vol.9, no. 10, Oct. 1958

PAUL, V. Application of the titanometric method to the analysis of
inophenols. p. 576.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 2.
February 1959, Unclass.

BRODMAN, F.; STULEANU, C.; IACOB, B.; PAUL, V.

The anthraquinone-carbazolic dyestuffs. Rev chimie Min petr
14, no.4:222-223 Ap '63.

SANIELEVICI, H.; BRODMAN, F.; TEODORESCU, L.; PAUL, V.; PASCALIDE, R.;
IACOB, B.; STULEANU, C.

Organic pigments for plastic materials. Pt 2. Rev chimie Min petr
13 no.11:668-674 N '62.

SANIELEVICI, H.; BRODMAN, F.; IACOB, B.; TEODORESCU, L.; PAUL, V.;
PASCALIDE, R.; STULEANU, C.

Organic pigments for plastic materials. Pt. 1. Rev chimie Min
petr 13 no.10:577-583 0 '62.

LEYN, S.D.; PAUL, V.A., ~~el~~esar'-remontnik

Redesigning of the drive of the KV-240-Sh dyeing apparatus. Tekst.
prom. 22 no.4:86 Ap '62.

1. Nachal'nik otdelochnogo proizvodstva fabriki "Rigas Tekstils"
latviyskogo sovmarkhoza (for Leyn). 2. Fabrika "Rigas Tekstilov"
latviyskogo sovmarkhoza (for Paul).
(Riga---Dyes and dyeing---Apparatus)

ALEKSEYEV, Aleksey Pavlovich, kand.tekhn.nauk; SESSAREVSKIY, A.N., inzh.,
retsenzent; PAUL', V.P., inzh., red.; BOBROVA, Ye.N., tekhn.red.

[Overall mechanisation of construction operations in the
electrification of railroads] Kompleksnaya mekhanizatsiya stroi-
tel'nykh rabot pri elektrifikatsii zheleznykh dorog. Moskva, Vses.
izdatel'sko-poligr.ob'edinenie M-va putei soobshchenia, 1961. 141 p.
(MIRA 14:6)

(Railroads—Electrification)

ONUFRIYEV, Timofey Grigor'yevich, dots.; SHATNEV, Boris Nikolayevich,
dots.; IVAN'KO, Timofey Yakovlevich, inzh.; GEROL'SKAYA, Lyudmila
Sergeyevna, dots.; SARYCHEVA, Nina Petrovna, dots.; KOSTIYAYEV,
Sergey Petrovich, inzh.[deceased]; YEGOROV, L.P., dots., retsenzent;
ZAYCHENKO, I.R., dots., retsenzent; BYALYNITSKIY, V.A., inzh., retsenzent;
CHERKASHIN, N.A., inzh., retsenzent; DYNER, I.I., inzh., retsenzent; PAUL',
V.P., inzh., red.; NEKLEPAYEVA, Z.A., inzh., red.; MEDVEDEVA, M.A.,
tekhn. red.

[Buildings in railroad transportation] Zdaniia na zheleznodorozh-
nom transporte. Moskva, Transzheldorizdat, 1962. 408 p. (MIRA 15:6)
(Railroads--Buildings and structures)

PAUL', V.P.; YANKOVSKIY, O.A., starshiy nauchnyy sotrudnik; KUSHNIR, M.M.

Comprehensive and continuous organization of the construction of
railroads. Transp. stroi. 14 no.2:3-4. F '64. (MIRA 17:4)

1. Rukovoditel' laboratorii organizatsii transportnogo stroitel'stva
Vsesoyuznogo nauchno-issledovatel'skogo instituta transportnogo
stroitel'stva Ministerstva transportnogo stroitel'stva (for Paul').
2. Glavnyy inzh. upravleniya Karagandastroypu' (for Kushnir).

PANI', V.P., inzh.

Using production-11. in constructing railroads. (S. A. 11:1)
stoi. 11 no.2:39-11. '61.
(11:11:11--Construction)

ALEKSEYEV, Ye.P.; PAUL', V.P.

New Abakan-Taishet railroad line. Transp.stroi. 9 no.3:8-13
Mr '59. (MIRA 12:4)

1. Glavnyy inzhener proyekta novoy zheleznodorozhnoy linii
Abakan-Tayshet (for Alekseyev). 2. Rukovoditel' sektora organizat-
sii stroitel'stva Tsentral'nogo nauchno-issledovatel'skogo insti-
tuta svyazi (for Paul').
(Siberia--Railroads--Construction)

MATVEYEV, Nikolay Ivanovich, dotsent, kand.tekhn.nauk; NEPRINTSEV, Mikhail Nikolayevich, dotsent, zasluzhonnyy deyatel' nauki i tekhniki; PERSIANOV, Moisey Artem'yevich, dotsent, kand.tekhn.nauk; SOKOLOV, P.G., inzh., retsenzent; PAUL', V.P., inzh., red.; VERINA, G.P., tekhn.red.

[Principles of construction in railroad transportation] Osnovy stroitel'nogo dela na zheleznodorozhnom transporte. Moskva, Gos.transp.zhel-dor.izd-vo. Pt.2. [Construction operations and buildings] Stroitel'nye raboty i zdaniia. 1959. 311 p.
(MIRA 12:9)

(Building) (Railroads--Buildings and structures)

PAUL', V.P., inzhener.

On the construction site of the Keresuk-Kamen' railroad. Transp.
strel. 7 no.1:3-5 Ja '57. (MLRA 10:3)
(Railroads--Construction)

PAUL', V.P.

LEBEDEV, Mikhail Nikolayevich, kandidat tekhnicheskikh nauk; ASHEKO, Sof'ya Mikhailovna, kandidat tekhnicheskikh nauk; ZMIYENKO, Sergey Mitrofanovich, kandidat tekhnicheskikh nauk; KRYUKOV, Georgiy Nikolayevich, kandidat tekhnicheskikh nauk; SIDOROV, Nikolay Nikolayevich, kandidat tekhnicheskikh nauk; PAUL', V.P., inzhener, redaktor; YUDZON, D.M., tekhnicheskiiy redaktor

[Building] Stroitel'noe proizvodstvo. Pod red. M.N. Lebedeva. 2-e perer. izd. Moskva, Gos. transportnoe zheleznodor. izd-vo, 1954.
489 p. (MIRA 8:4)

(Building)

IVANOV, Igor' Nikolayevich; PAUL', V.P., inzhener, redaktor; VERINA,
G.P., tekhnicheskii redaktor

[Construction of railroad buildings made of masonry wall blocks]
Postroika zheleznodorozhnykh zdaniy iz krupnykh stenovykh blokov.
Moskva, Gos. transportnoe zhel-dor. izd-vo, 1955. 51 p. (MLRA 8:6)
(Railroads--Buildings and structures)
(Building blocks)

ALEKSEYEV, Aleksey Pavlovich, inzhener; PAUL', V.P., inzhener, redaktor;
KHITROV, P.A., tekhnicheskii redaktor

[Construction of industrial buildings for railroads] Opyt stroitel'-
stva zheleznodorozhnykh promyshlennyykh zdaniy. Moskva, Gos. tran-
sportnoe zhel-dor. izd-vo, 1955. 82 p. (MLRA 8:6)
(Railroads--Buildings and structures)
(Building)

SHATNEV, Boris Nikolayevich, kandidat tekhnicheskikh nauk; PAUL', V.P.,
inzhener, redaktor; VERINA, G.P., tekhnicheskii redaktor

[Buildings in railroad transportation] Zdanila na zheleznodo-
rozhnom transporte. Moskva, Gos.transp.zhel-dor.izd-vo, 1955.
474 p. (MIRA 9:3)
(Railroads--Building and structures)

PAUL', V. P.

SOKOLOV, Fedor Grigor'yevich; PAUL', V.P., inzhener, redaktor; VISHINA, G.P.,
tekhnicheskij redaktor

[Building of railroad structures] Stroitel'stvo zhelezndorozhnykh
zdanii. Moskva, Gos.transp.zhel-dor.izd-vo, 1957. 339 p.
(MLRA 10:9)

(Railroads--Buildings and structures)

~~SESSARIVSKIY~~, Aleksandr Nikolayevich; PAUL', V.P., red.; YUDZON, D.M.,
tekhn.red.

[New construction materials for railroad buildings] Novye materialy
dlya stroitel'stva zheleznodorozhnykh zdaniy. Moskva, Gos.transp.
zhelezn-dor.izd-vo, 1954. 69 p. (MIRA 14:4)
(Building materials)
(Railroads--Buildings and structures)

SOSNOVSKIY, L.A.; PAUL, V.P., kand. tekhn. nauk. FISHCHENKOV, M.A., kand. tekhn. nauk; DOBSHITS, M.L., inzh.; LUTSKIY, D.Ya., inzh.

Graphic work schedule and management in the construction of the
Gur'ev - Astrakhan railroad. Transp. stroi. 15 no.10:5-7 0 1986.
MIKA 18.1.

1. Glavnyy tekhnolog upravleniya stroitel'stvom No.99 (for
Sosnovskiy).

HUNGARY/Nuclear Physics - Elementary Particles.

C

Abs Jour : Ref Zhur Fizika, No 4, 1960, 7559

Author : Paul, W.

Inst : -

Title : Circular Polarization of γ Rays that Follow the Decay of Polarized Heavy Particles.

Orig Pub : Naturwissenschaften, 1959, 46, No 9, 277-283

Abstract : The circular polarization of γ rays that arise during the decay of polarized heavy particles is proportional to the degree of polarization of these particles. For the coefficient of proportionality the author obtains a value which is independent of the details of the interaction and which is the result of purely geometric factors (depending on the spins and parities of the particles).

Card 1/1

Pavlas, P.

CZECHOSLOVAKIA / Chemical Technology. Chemical Products H
and Their Application. Carbohydrates
and Their Processing.

Abs Jour: Ref-Zhur-Khimiya, No 9, 1959, 33006.

Author : Pavlas, P., Molounova-Hauslerova, O.

Inst : Not given.

Title : The Composition of the Sugar Beet and Juices
in the Industrial Season of 1957-58.

Orig Pub: Listy cukrovarn., 1958, 74, No 8, 175-183.

Abstract: The composition of sugar beets of 63 sugar re-
fineries, and diffused juices and syrups of 49
sugar refineries in Czechoslovakia, are sub-
mitted. In 1957, the growth of beets took
place in an ample supply of moisture. The av-
erage weight of the roots was 578.2 g.; sugar
content, 16.71% (16.64-14.77%); pulp, 4.41%;

Card 1/3

251

PAVLAS

P.

Chromatographic and electrophoretic separation of amino acids in the diffusion and thick agar-bee juices from the campaign 1954-56. P. Pavlas and O. Melounová-Häuslerová. *Časopis. 72, 35-7(1958)*.—By 2-dimensional paper chromatograms of Czech sugar-beet juices (developed with $\text{PhOH-H}_2\text{O}$ 3:1, and BuOH-AcOH-water 4:1:5) the following were identified: aspartic and glutamic acids, serine, glycine, threonine, alanine, tyrosine, valine, phenylalanine, leucine, isoleucine, histidine, arginine, lysine, asparagine, glutamine, and in one instance proline. The amino acids were separated according to the source and processing conditions. Paper electrophoresis sep'd. basic, acidic, and neutral amino acids which were subsequently developed by 1-dimensional paper chromatograms. At one end were formed distinct spots of glutaric and glutamic acids, and at the other were found lysine and histidine.

T. Jurecic

L3021

S/194/62/000/010/046/084
A061/A126

AUTHORS: Ilgunas, V., Paulauskas, K.

TITLE: Effect of the design of an ultrasonic interferometer on the reaction curve quality

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 10, 1962, 15 - 16, abstract 10-5-30f (In collection: Primeneniye ul'traakust. k issled. veshchestva, no. 13, M., 1961, 139 - 149)

TEXT: This is on the further development of the ultrasonic interferometer theory, which permits of doing without the simplifying assumption of the rear interferometer crystal wall being free. The electric impedance of the crystal is calculated in the presence of layers of finite thickness at either side of the crystal. It is shown that the electric impedance of the crystal can be expressed through the mechanical impedances of the boundary layers as follows:

$$Z = \frac{a^2}{4 e^2 S} \cdot (Z_{in} - Z_{ein}) ,$$

Card 1/2

L 27242-45 EWT(d)/EPI(n)-2/EWP(1) Po-4/Pq-4/Pg-4/Pu-4/Pk-4/Pj-4 IJP(c)
 ACCESSION NR: AT5003904 WW/QB/BC S/0000/64/000/000/0048/0058

AUTHOR: Paulauskas, Ts. Ts.

TITLE: Some problems in the construction of discrete automatic optimizers

SOURCE: Vsesoyuznaya konferentsiya-seminar po teorii i metodam matematicheskogo modelirovaniya. 3d, 1962. Vychislitel'naya tekhnika v upravlenii (Computer technology in control engineering); sbornik trudov konferentsii. Moscow, Izd-vo Nauka, 1964, 48-58

TOPIC TAGS: optimization control system, optimal control, digital optimizer

ABSTRACT: An optimization system is described, consisting of two parts, an operational unit and a control unit. The operational unit, made up of analog elements, applies trial increments, analyzes the response of the objects, and develops operating signals. The se-

Card 1/3

L 27242-65

ACCESSION NR: AT5003904

quence of the optimization operation (its algorithm) is specified by a digital control unit, which quantizes the operational-unit quantities in time. The noise acting on such a system is described. A working model of a two-channel digital optimizer based on this principle, consisting of about 400 transistors and 1000 diodes, was tested. The analysis and the test results lead to the following conclusions: An increase in the stability of the optimizer blocks, aimed at improving the performance of the automatic optimization system, is possible by using an automatic optimizer consisting entirely of digital elements. A single minimum of the optimized quantity, which depends on a relatively small number of variables (3--12) on which certain limits are imposed in the form of inequalities, can be determined with a simpler digital automatic optimizer in which a search algorithm is realized, combining the method of steepest descent for search away from the minimum and the gradient method near the minimum. When the number of variables is large, the limitations are of complicated form, and several local minima are to be found, it becomes

Card

2/3

I 27242-05

ACCESSION NR: AT5003904

necessary to construct a digital automatic optimizer in the form of a special-purpose computer with universal arithmetic and memory units. Orig. art. has: 5 figures and 1 table.

ASSOCIATION: None

SUBMITTED: 17Aug64

ENCL: 00

SUB CODE: IE, DP

NR REF NOV: 011

OTHER: 001

Card

3/3

PAULAVICHUS, V., inzh.

Oleo-pneumatic riveting press. Avt.transp. 42 no.1:29-30 Ja '64.
(MIRA 17:2)

(A) L 1554-66 ENT(m)/ENP(j)/T RM
ACCESSION NR: AP5021825 22
UR/0342/65/000/008/0066/0070
677.494.675.862.5 16
AUTHOR: Paulauskas, A. P. (Candidate of chemical sciences); Visockinskas, A. A. 44.55
(Research Associate) 15.44.55
TITLE: Change in certain properties of polyamide fibers and fabrics during long-term natural insolation
SOURCE: Tekstil'naya promyshlennost', no. 8, 1965, 66-70
TOPIC TAGS: polyamide fiber, polyamide fabric, capronic fabric insolation, textile industry
ABSTRACT: The object of the work was to study the change in certain properties of capronic threads and fabrics, both untreated and treated, during a long-term natural insolation. It was found that the stability of the samples subjected to outdoor exposure depends on their form (number of threads, grade, interweaving of the fabric, etc.) and on the nature of the treatment (curing, dyeing, etc.). Capron samples cured with saturated vapor are less stable toward photochemical destruction than samples cured with hot dry air, as indicated by a decrease in the tensile strength, bending strength, wear resistance, etc. Capronic threads and fabrics, independently
Card 1/2

L 1554-66

ACCESSION NR: AP5021825

of their form and of the nature of their treatment, are damaged mostly during the first 10 to 30 days of insolation. Curing with hot dry air is the best means of preventing the yellowing of capronic fabrics during insolation. Orig. art. has: 6 figures and 2 tables.

ASSOCIATION: Kaunas'kiy politekhnicheskii institut (Kaunas Polytechnic Institute); Nauchno-issledovatel'skiy institut tekstil'noy promyshlennosti (Scientific Research Institute of the Textile Industry)

SUBMITTED: 00

ENCL: 00

SUB CODE: MT

NO REF SOV: 002

OTHER: 006

Card 2/2

BAZEVICIUS, I.M., glavnyy inzhener fabriki; SHURKO, V.I., nachal'nik
otdelochnogo tsekha; PAULAIUSKAS, A.P., inzhener.

Heavy woolens produced by the "Litexas" factory. Tekst.prom.
14 no.11:6-7 B '54. (NLRA 8:1)
(Lithuania--Woolen and worsted manufacture)

PAULAUŠKAS, S.F., doklady, kand. khim. nauk; VISKINSKAS, A.A., nauchnyy
trudnik

Changes in some properties of polyamide fibers and fabrics due
to prolonged exposure to sun's rays. Tekst. prom. 25 no.8:66-
70 Ag '65. (MIRA 18:9)

1. Kaunasiskiy politekhnicheskii institut (for Paulauskas).
2. Nauchno-issledovatel'skiy institut tekstil'noy promyshlennosti,
Kaunas (for Viskinskay).

ILGUMAS, V.; PAULAUŠKAS, R.

Effect of the design of an ultrasonic interferometer on the
form of the reaction curve. Prim. ul'traakust. k issl. veshch.
no.13:139-149 '61. (MIRA 16:6)

(Interferometer)

(Crystals--Acoustic properties)

PAULAUSSAS, E. A.

Dissertation: "Investigation of the Electric Drive of a roller Conveyor Working on the Generator-Motor System Using Magnetic Amplifiers for Control and Regulation." Tech Sci, Moscow Order of Lenin Power Engineering Inst. Eng. V. I. Volotov, Moscow. Vechernyaya Moskva, Moscow, 12 Jan 54.

SO: SUM 2-4, 26 Nov 1954

PAULAUSKAS, M.A.; VANITSKIS, A.I. [Janickis, A.]

Mechanical characteristics of the system "magnetic amplifier-
direct current motor." Trudy AN Lit. SSR. Ser. B no.2:147-153
'63. (MIRA 17:10)

1. Institut energetiki i elektrotehniki AN Litovskoy SSR.

PAULASKAS, M.A.

Dynamics of the system "Magne 1" amplifier - direct current motor,"
Trudy AN Lit. Ser. R No. 1355-1361 '63. (MIRA 17:1)

1. Institut energetiki i elektrotekhniki AN Litovskoy S.S.R.

PAULATSKAS, E.A.

Static characteristics of a current amplifier with negative feedback loaded with active resistance and opposing e.m.f. Lit. Sci. Ser. 8 no. 3: 2-11 (1974).

1. Institut energetiki i elektrotekhniki (Leningrad).

SNIPAS, P., med. m. kand.; PAULASKAS, S.; ZABIELA, P.

On the problem of patient-physician relations. Sveik. apsaug.
8 no.5:43-46 '63.

1. Kauno Valst. medicinos instituto hospitalines terapijos
katedra (vedejas - prof. Z. Januskevicius) ir Resp. Kauno
klinine ligonine (vyr. gydytojas - doc. P. Jasinskas).
(PHYSICIAN-PATIENT RELATIONS)
(ETHICS, MEDICAL)

L 36547-66 EWT(1)/EWT(m)/I/EWP(k)

ACC NR: AF6016837

(N)

SOURCE CODE: UR/0046/66/012/002/0258/0261

AUTHOR: Ilgunas, V.; Paulauskas, K.

ORG: Kaunas Polytechnical Institute (Kaunasskiy politekhnicheskiy institut)

TITLE: Measurement of absorption of ultrasound in liquids by means of an interferometer
9M

SOURCE: Akusticheskiy zhurnal, v. 12, no. 2, 1966, 258-261

TOPIC TAGS: ultrasound absorption, liquid property, interferometer, acoustic measurement, acoustic speed

ABSTRACT: The authors report that they were able to increase the sensitivity of interferometric measurements of the absorption of ultrasound in liquids by using new electric supply and indication circuits, mechanical fastening of the radiating crystal, and a new reflector construction (Fig. 1). This has made it possible to develop a new method of measuring absorption of ultrasound in liquids for frequencies 1 - 15 Mcs. Simultaneously, it makes it possible to determine the velocity of sound in the investigated liquid and the coefficient of reflection of the sound waves from the reflector. The absorption was measured with a precision interferometer of the Pierce type equipped with an adjustment for the parallelism of the reflector and the crystal, which radiated directly into the liquid. The theory of

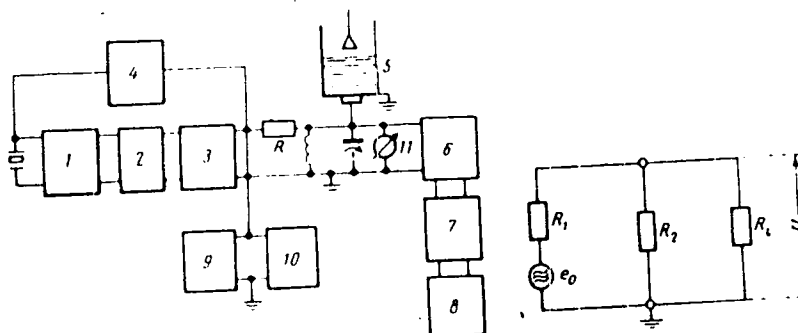
Card 1/3

UDC: 534.286: 532

L 36547-66

ACC NR: AP6016837

Fig. 1. Block diagram of setup (left) and equivalent circuit (right). 1 - Quartz generator, 2 - broad-band amplifier, 3 - high-frequency power amplifier, 4 - automatic amplitude control, 5 - interferometer chamber, 6 - cathode detector, 7 - dc amplifier, 8 - low-frequency oscilloscope, 9 - high-frequency oscilloscope, 10 - heterodyne wave meter, 11 - vacuum-tube volt meter.



the instrument and the calculation of the required corrections are briefly given. The accuracy of the method is approximately 10% at low absorption and 2.5% at high absorption. Test results are presented for water, acetone, ethyl alcohol, turpentine, carbon tetrachloride, benzene, acetic anhydride, and castor oil. Advantages claimed for the method are sensitivity adequate for the measurement of low absorp-

Card 2/3

L 36547-66

ACC NR: AP6016837

tion, simpler method of determining the absorption coefficient, and ease of adjustment of the apparatus. Orig. art. has: 3 figures, 2 formulas, and 1 table.

SUB CODE: 20/ SUBM DATE: 05Dec64/ ORIG REF: 002/ OTH REF: 002

Card 3/3/MLP

PAULAUSKAS, TS. TS. (Moskva)

Discrete automatic optimizer. Part II. Avtom. i telem. 23
no.11:1497-1506 N '62. (MIRA 15:10)

(Automatic control)

33755

S/103/62/023/001/003/014
D201/D304

16.8000 (1031,1121,1329)

AUTHOR: Paulauskas, Ts.Ts. (Moscow)

TITLE: Investigating a gradient automatic optimization system in the presence of random noise at the input and output of the object

PERIODICAL: Avtomatika i telemekhanika, v. 23, no. 1, 1962, 34-44

TEXT: The author considers a real system of optimization in which a multi-channel automatic optimizer is used as controller and where noise which may be present, substantially affects the optimization process performance. The block diagram of the system is shown in Fig. 1. The controller Y consists of a common unit Y_0 and channels $YK_1, YK_2, \dots, YK_m$, producing outputs $u_1, u_2, \dots, u_m$. The output Y at the output F_0 of the object O has to be minimized. It is added to the error Z_2 in the part F of the object. At the object input the controlling quantities u_i ($i = 1, 2, \dots, m$) are added to random interference Z_{01} , so that the input of the object consists of

Card 1/3

33765

S/103/62/023/001/003/014

Investigating a gradient automatic ... D201/D304

the sum $x_1 = u_1^i + z_{01}$. If the optimizer consists of sampling elements, owing to the time-instability of the characteristics of coordinate storage devices an additional random interference appears, which during sampling is added to the sum of $x_1 = u_1^i + z_{01}$ and of the sample signal $\pm \alpha_{01}$. Owing to the same time-instability of storage elements, the derivatives also vary in time, so that the effect of interference is especially high for a large number of m inputs. For the above system of m -dimensional gradient system of automatic control the methods are given for determining the error γ of the sampling process by evaluating the mathematical expectation of a random quantity γ_n , determined as the arithmetical mean over the n -th sampling period. The results are used for determining for an object with a parabolic characteristic and the design procedure in determining the optimum parameters of the controlling device is given. The author acknowledges the help of A.A. Fel'dbaum. There are 5 figures and 5 Soviet-bloc references.

SUBMITTED: July 29, 1961

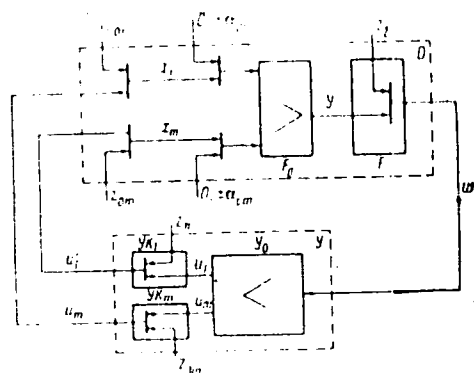
Card 2/3

Investigating a gradient automaton ...

103/62/023/001/003/014

01/10304

Fig. 1.



Page 1

Card 3/3

PAULASKAS, TS.TS. (Moskva)

A discrete automatic optimiser. Part 1. Avtom. i telemek.
23 no.5:610-619 My '62. (MIRA 15:5)
(Automatic control)

PAULAUSKAS, TS.TS. (Moskva)

Investigation of a gradient automatic optimization system in the
presence of random interference at the input and output of the
object. Avtom. i telem. 23 no.1:34-44 Ja '62. (MIRA 15:1)
(Automatic control)

S/103/62/023/005/007/011
D407/D301

AUTHOR: Paulauskas, Ts.Ts. (Moscow)

TITLE: Discrete automatic optimizer. I

PERIODICAL: Avtomatika i telemekhanika, v. 25, no. 4, 1982,
610 - 619

TEXT: A discrete automatic optimizer is described which is convenient in practice if the number of variables does not exceed 12, the function Q (the optimization criterion) has one extremum, and the restrictions H_i are given in the form of inequalities. The diagram and the results of tests of the proposed optimizer are given. It consists of the operational device OD and of the control device CD. The mathematical operations and the storing of variables are performed by means of the operational device, whereas the control device performs the given algorithm of extremum search. The operating principle of the optimizer is as follows: With large distances from the minimum, the search is conducted by the method of steepest descents and with small distances by the method of gradient. In each case the search consists of 2 principal stages: a) Determination, by Card 1/3

Discrete automatic optimizer. I

S/103/62/023/005/007/011
D407/D301

means of trial signals, of the most convenient change in direction of the x_1 coordinate; b) realization of the motion in the direction thus found. The optimization involves, in addition to the minimization of the criterion Q , also the minimization of the largest of $H_j > 0$, or of the sum of the H_j ($j = 1, 2, \dots, m$). The optimizer channels consist of the storing-converting devices $Y3\bar{U}-1$ (UZP-1) ($i = 1, 2, \dots, n$), each incorporating a reversible counter for storing the coordinates of the object, and registers for the partial derivatives and trial signals. The control device consists of a multi-channel commutator. As the design of the latter is of intrinsic interest (regardless of its use as a unit of the optimizer), its description is given separately. The main unit of the commutator is the transistor diode matrix $M-D$ (M-D) which performs the operation of logical multiplication. The operating principle of the commutator is analogous to M.V. Wilkes - J.B. Stringer's micro-programming device (Ref. 13: Micro-Programming and the Design of the Control Circuits in an Electronic Digital Computer. Proc. Cambridge Philosoph. Soc., v. 49, pt. 2, April 1953). The model optimizer incorporates non-saturated flip-flops as well as saturated ones consisting

Card 2/3

Discrete automatic optimizer. I

S/103/62/023/005/007/011
D407/D301

of 2 inverters. The testing of the model yielded satisfactory results. The circuit incorporates 80 triodes ≈ 15 (P 15), 6 triodes ≈ 11 (P 11), and 300 diodes ≈ 9 E (DSV). All the resistors were of the type MMT -0.5 (MMT-0.5), and the capacitors - of type CT-4 (KTK). There are 6 figures and 15 references: 12 Soviet-bloc and 3 non-Soviet-bloc.

SUBMITTED: December 14, 1961

Card 3/3

ACC NR: AR6035241

SOURCE CODE: UR/0372/66/000/008/G032/B032

AUTHOR: Paulauskas, Ts. Ts.; Vitkute, A. Yu.

TITLE: Determination of the structure and weight coefficients of pattern classifiers with statistically dependent signals

SOURCE: Ref. zh. Kibernetika, Abs. 8G202

REF SOURCE: Sb. Avtomatika i vychisl. tekhn. Vil'nyus, 1965, 23-29

TOPIC TAGS: signal processing, information processing, signal correlation

ABSTRACT: Problems of synthesizing classifiers depending on the nature of the information received from the analyzer are discussed. The structure and parameters are determined of a statistical classifier whose input signals are random variables which statistically depend on each other when their values are both 1 to 0, and even +1 or -1. In order to recognize patterns with statistically dependent parameters, it is necessary to take in addition to the weighted input signals, also their weighted double, triple, etc., products. In the transition from a system of input signals with 1-0 values to a (+1)-(-1) system, the block-

Card 1/2

UDC: 62-506;621.391.193

ACC NR: AR6035241

diagram of the classifier remains the same and only the expressions for the weight coefficients undergo a change. Three illustrations. [Translation of abstract]

[DW]

SUB CODE: 09 /

Card 2/2

KHESIN, R.B.; PETRASHKAYTE, S.K.; TOLYUSHIS, L.E.; PAULASKAYTE, K.P.

Protein synthesis in isolated cytoplasmic granules [with summary in English]. Biokhimiia 22 no.3:501-515 My-Je '57. (MIRA 10:11)

1. Kafedra biokhimiia Kaunasskogo gosudarstvennogo meditsinskogo instituta.

(PROTOPLASM,

synthesis of proteins in isolated cytoplasmic granules)

(PROTEINS, metabolism,

synthesis in isolated cytoplasmic granules (Rus))